

DESCRIPTIVE ABSTRACT

A calculation for reconstructing tomographic images involves the decomposition of two-dimensional sets of projections of this image by a wavelet decomposition method, in which the set of projections is separated into thumbnail images expressing the whole and the higher frequency details of the projections, respectively. The reconstruction is carried out separately on the thumbnail images before making a combination. Certain properties of this decomposition, notably in the Fourier frequency domain, provide substantial reduction of the amount of calculations.

Fig. 2.